

Hosein, H.R., Corey, P. "Domestic Air Pollution and Respiratory Function in a Group of Housewives" Canadian Journal of Public Health 77: 44-50, 1986.

SUMMARY: We determined air pollution exposure to sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>) and respirable suspended particulates (RSP) for a group of symptomatic housewives and a matched control group using a specially designed domestic air pollution sampler. The NO<sub>2</sub> and RSP levels were higher indoors than outdoors, whereas the SO<sub>2</sub> levels were higher outdoors. The cases and controls showed the same air pollution exposures. The use of gas stoves resulted in elevated levels of NO<sub>2</sub> which might account for the observed reduction in lung function of residents in homes with gas stoves. Cigarette smoking indoors resulted in elevated particulate levels. The maximum expiratory flow (MEF) at 25% and 50% of vital capacity for non-smoking housewives showed a significant correlation with indoor particulate levels. Multiple regression analyses showed that RSP was a better predictor than NO<sub>2</sub> of lung function changes.

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